

Figure 1 consists of 15 bar charts, labeled (a) through (o), each representing a different demographic or attitudinal variable. The y-axis for all charts is 'Percentage' ranging from 0 to 100. The x-axis for each chart represents the variable being measured. The variables and their corresponding percentages are as follows:

- a) Age: 18-24 (15%), 25-34 (25%), 35-44 (30%), 45-54 (20%), 55-64 (10%), 65+ (10%)
- b) Sex: Male (55%), Female (45%)
- c) Education: High school (30%), College (40%), Graduate (30%)
- d) Income: Less than \$10,000 (15%), \$10,000-\$19,999 (25%), \$20,000-\$29,999 (30%), \$30,000-\$39,999 (20%), \$40,000-\$49,999 (10%), \$50,000+ (10%)
- e) Religion: Protestant (45%), Catholic (35%), Jewish (10%), Muslim (5%), Other (5%)
- f) Marital status: Single (30%), Married (55%), Divorced (10%), Widowed (5%)
- g) Political affiliation: Democrat (45%), Republican (35%), Independent (15%), Other (5%)
- h) Party affiliation: Democrat (45%), Republican (35%), Independent (15%), Other (5%)
- i) Party identification: Democrat (45%), Republican (35%), Independent (15%), Other (5%)
- j) Party loyalty: Democrat (45%), Republican (35%), Independent (15%), Other (5%)
- k) Party support: Democrat (45%), Republican (35%), Independent (15%), Other (5%)
- l) Party preference: Democrat (45%), Republican (35%), Independent (15%), Other (5%)
- m) Party choice: Democrat (45%), Republican (35%), Independent (15%), Other (5%)
- n) Party selection: Democrat (45%), Republican (35%), Independent (15%), Other (5%)
- o) Party decision: Democrat (45%), Republican (35%), Independent (15%), Other (5%)

1 A sound generation arrangement for a computing system, comprising:

a predetermined sound generation arrangement to generate sound according to primary sound instructions implemented in the computing system;

a monitor arrangement to monitor for predetermined evidence of occurrence of ancillary sound instructions which differ from said primary sound instructions; and

an ancillary waveform library arrangement containing predetermined ancillary waveforms, and adapted to use said predetermined ancillary waveforms to emulate predetermined ancillary sounds responsive to an ancillary sound instruction as monitored by said monitor arrangement.

2. A sound generation arrangement as claimed in claim 1, wherein said monitor arrangement is a snoop arrangement adapted to snoop a predetermined communication path for occurrence of said ancillary sound instructions.

3. A sound generation arrangement as claimed in claim 1, wherein said monitor arrangement is a snoop arrangement adapted to snoop a predetermined storage location for occurrence of said ancillary sound instructions.

4. A sound generation arrangement as claimed in claim 1, wherein said monitor arrangement is arranged to monitor a state of an ancillary sound generation arrangement as indication of occurrence of said ancillary sound instructions.



an ancillary waveform library arrangement containing predetermined ancillary waveforms, and adapted to use said predetermined ancillary waveforms to emulate predetermined ancillary sounds responsive to an ancillary sound instruction as monitored by said monitor arrangement.

10. A chipset as claimed in claim 9, wherein said monitor arrangement is a snoop arrangement adapted to snoop a predetermined communication path for occurrence of said ancillary sound instructions.

11. A chipset as claimed in claim 9, wherein said monitor arrangement is a snoop arrangement adapted to snoop a predetermined storage location for occurrence of said ancillary sound instructions.

12. A chipset as claimed in claim 9, wherein said monitor arrangement is arranged to monitor a state of an ancillary chipset as indication of occurrence of said ancillary sound instructions.

13. A chipset as claimed in claim 9, wherein said monitor arrangement is responsive to an interrupt as evidence of occurrence of said ancillary sound instructions.

14. A chipset as claimed in claim 9, wherein said sound generation arrangement is adapted to operation in accordance with an Audio Codec (AC) '97 specification, and wherein said ancillary sound instruction is a pre-AC '97 sound instruction.

15. A chipset as claimed in claim 9, wherein said primary sound instructions are instructions in accordance with a contemporary sound specification, whereas said ancillary sound instructions are instructions with a legacy sound specification.

16. A system comprising:

a predetermined sound generation arrangement to generate sound according to primary sound instructions implemented in the computing system;

a monitor arrangement to monitor for predetermined evidence of occurrence of ancillary sound instructions which differ from said primary sound instructions; and

an ancillary waveform library arrangement containing predetermined ancillary waveforms, and adapted to use said predetermined ancillary waveforms to emulate predetermined ancillary sounds responsive to an ancillary sound instruction as monitored by said monitor arrangement.

17. A system as claimed in claim 16, wherein said monitor arrangement is a snoop arrangement adapted to snoop a predetermined communication path for occurrence of said ancillary sound instructions.

18. A system as claimed in claim 16, wherein said monitor arrangement is a snoop arrangement adapted to snoop a predetermined storage location for occurrence of said ancillary sound instructions.

19. A system as claimed in claim 16, wherein said monitor arrangement is arranged to monitor a state of an ancillary system as indication of occurrence of said ancillary sound instructions.

20. A system as claimed in claim 16, wherein said monitor arrangement is responsive to an interrupt as evidence of occurrence of said ancillary sound instructions.

21. A system as claimed in claim 16, wherein said sound generation arrangement is adapted to operation in accordance with an Audio Codec (AC) '97 specification, and wherein said ancillary sound instruction is a pre-AC '97 sound instruction.

22. A system as claimed in claim 16, wherein said sound generation arrangement is provided at least partially as part of a chipset.

23. A system as claimed in claim 16, wherein said primary sound instructions are instructions in accordance with a contemporary sound specification, whereas said ancillary sound instructions are instructions with a legacy sound specification.

24. A sound generation arrangement for a computing system, comprising:  
predetermined sound generation means for generating sound according to primary sound instructions implemented in the computing system;

monitor means for monitoring for predetermined evidence of occurrence of ancillary sound instructions which differ from said primary sound instructions; and

ancillary waveform library means for containing predetermined ancillary waveforms, and for using said predetermined ancillary waveforms to emulate predetermined ancillary sounds responsive to an ancillary sound instruction as monitored by said monitor means.

25. A sound generation arrangement as claimed in claim 24, wherein said monitor arrangement is a snoop means is for snooping a predetermined communication path for occurrence of said ancillary sound instructions.

26. A sound generation arrangement as claimed in claim 24, wherein said monitor arrangement is a snoop means is for snooping a predetermined storage location for occurrence of said ancillary sound instructions.

27. A sound generation arrangement as claimed in claim 24, wherein said monitor arrangement is arranged to monitor a state of an ancillary sound generation arrangement as indication of occurrence of said ancillary sound instructions.

28. A sound generation arrangement as claimed in claim 24, wherein said monitor arrangement is responsive to an interrupt as evidence of occurrence of said ancillary sound instructions.

30. A sound generation arrangement as claimed in claim 24, wherein said sound generation means is provided at least partially as part of a chipset.

31. A sound generation arrangement as claimed in claim 24, wherein said primary sound instructions are instructions in accordance with a contemporary sound specification, whereas said ancillary sound instructions are instructions with a legacy sound specification.

32. A sound generation arrangement for a computing system, comprising:

a snoop arrangement to snoop for indication of occurrence of a predetermined legacy sound instruction; and

a legacy waveform library arrangement containing predetermined legacy waveforms, and adapted to use said predetermined legacy waveforms to emulate predetermined legacy sounds responsive to a snooped legacy sound instruction as snooped by said snoop arrangement.

33. A sound generation arrangement for a computing system, comprising:

a monitor arrangement to monitor for indication of occurrence of a predetermined legacy sound instruction; and

a legacy waveform library arrangement containing predetermined legacy waveforms, and adapted to use said predetermined legacy waveforms to emulate predetermined legacy sounds responsive to a legacy sound instruction indicated by said monitor arrangement.